



# **CROSS CUTTING ISSUES TECHNICAL WORK GROUP CALL #2 - GOALS**

**MARCH 3, 2006**



# **TODAY'S AGENDA**

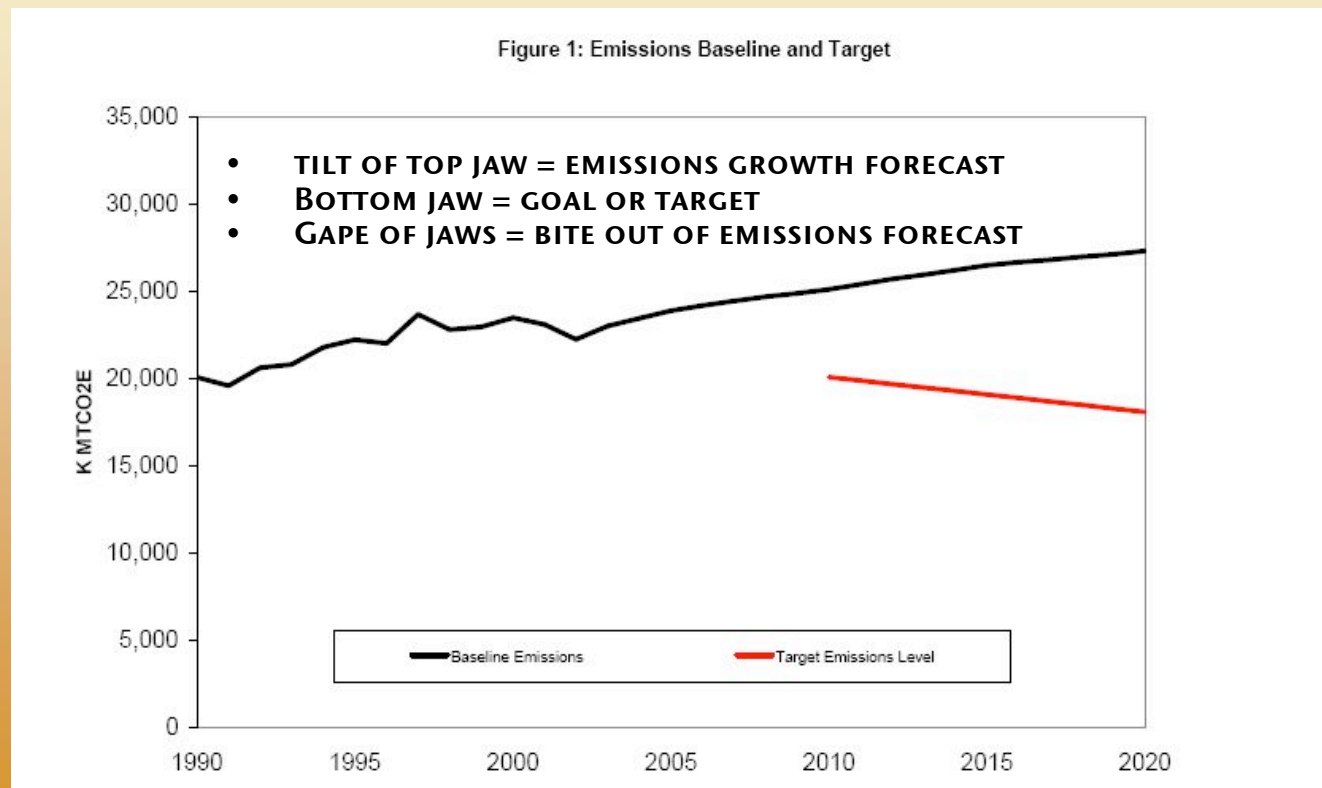
- 1. CALL TO ORDER**
- 2. ROLL CALL**
- 3. REVIEW OF GOALS ISSUES**
- 4. CALL TO THE PUBLIC AND  
ANNOUNCEMENTS**
- 5. AGENDA ITEMS FOR NEXT CC TWG  
CALL, CCAG MEETING**

# PART 1

- **STATE GHG GOALS**
  - **LINK SCIENCE AND POLICY**
  - **PROVIDE INCENTIVES, TRACKING,  
OPPORTUNITIES FOR COLLABORATION**

# JAWS GRAPH

## A.K.A. “CLIMATE GAP”



# CLIMATE GAP - NE, WEST COAST



March 3, 2006

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# CLIMATE GAP - AZ



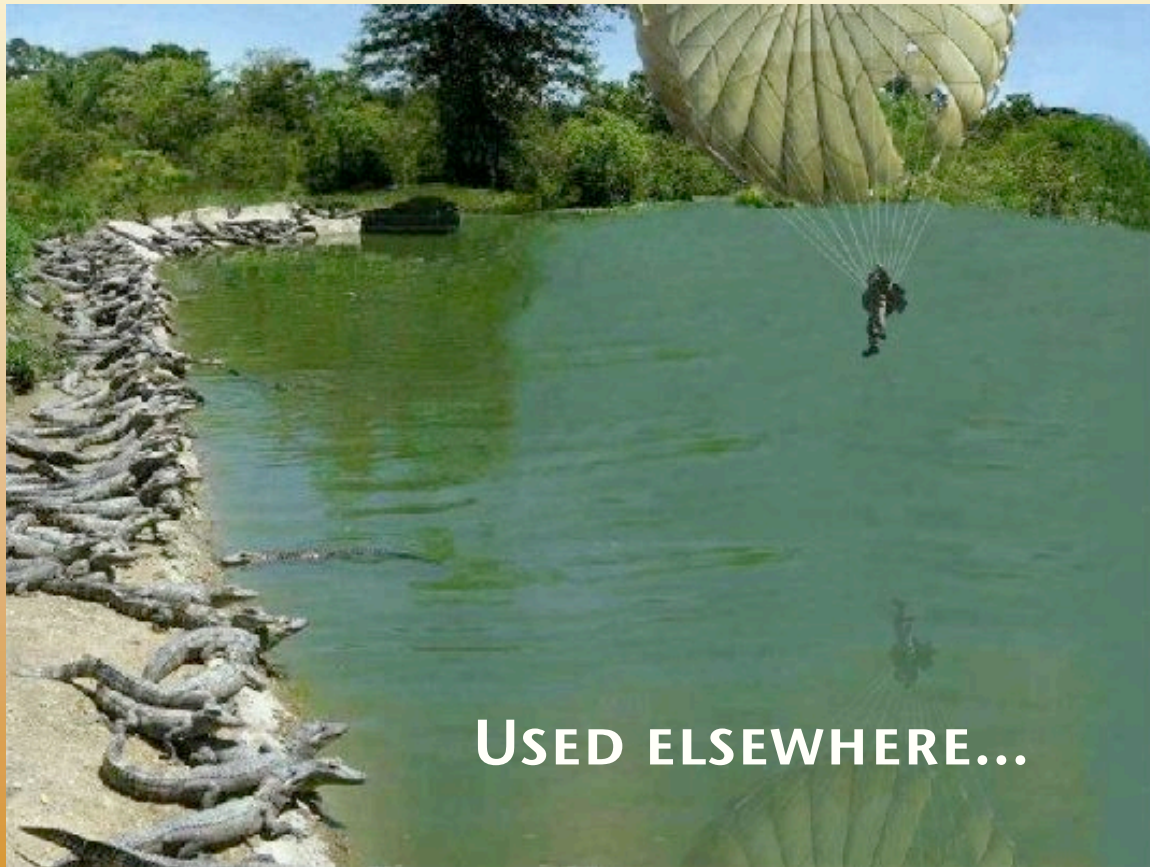
- **SMALLER OVERALL, BUT HIGHER GROWTH RATE**
- **GAPE OF THE JAW:**
  - CAN IT REMOVE THE SAME RELATIVE BITE FROM THE EMISSIONS FORECAST?

# BOTTOM UP APPROACH

	Codes & Standards	Market Mechanisms	Funding Mechanisms	Voluntary Agreements	Technical & Financial Assistance	Information & Education	Pilots & Demos	Reporting & Disclosure
Agriculture								
Commercial, Residential And Industrial								
Energy Supply		<b>USED IN ARIZONA CCAG, SOME OTHER STATES</b>						
Forestry								
Transportation and Land Use								
Waste Management								
Cross Cutting Issues								



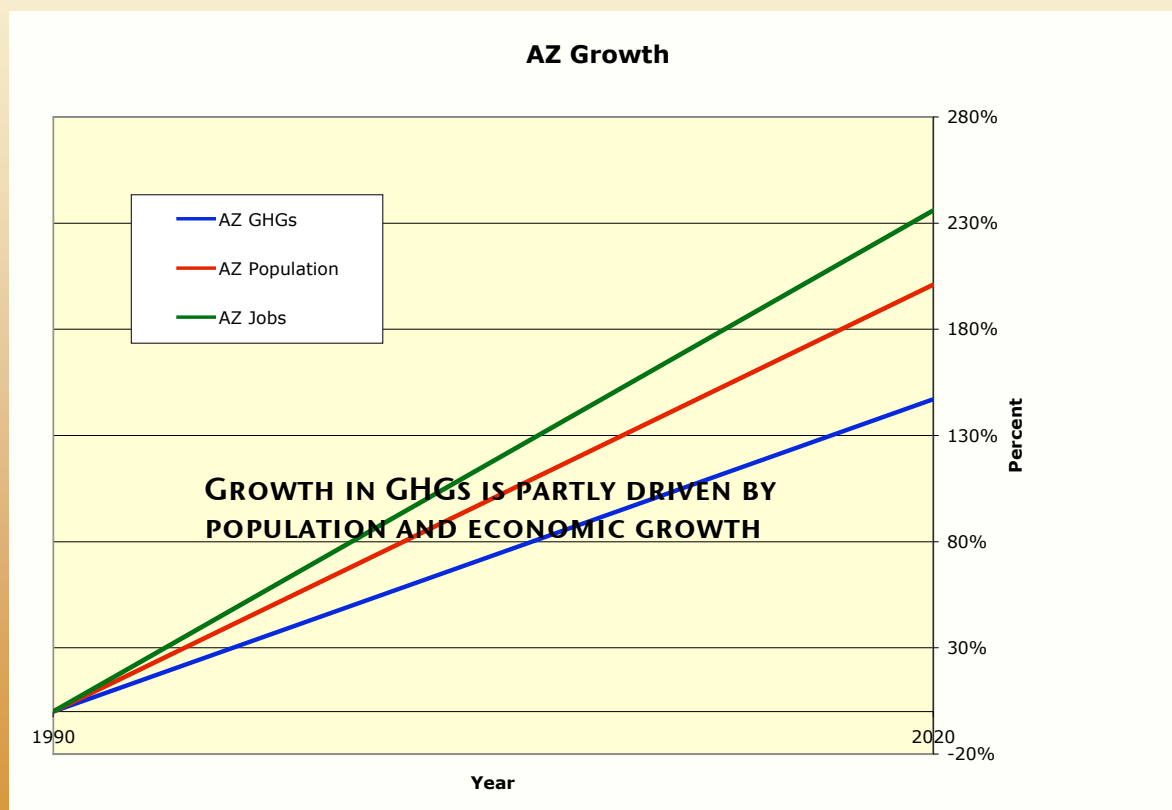
# TOP DOWN APPROACH





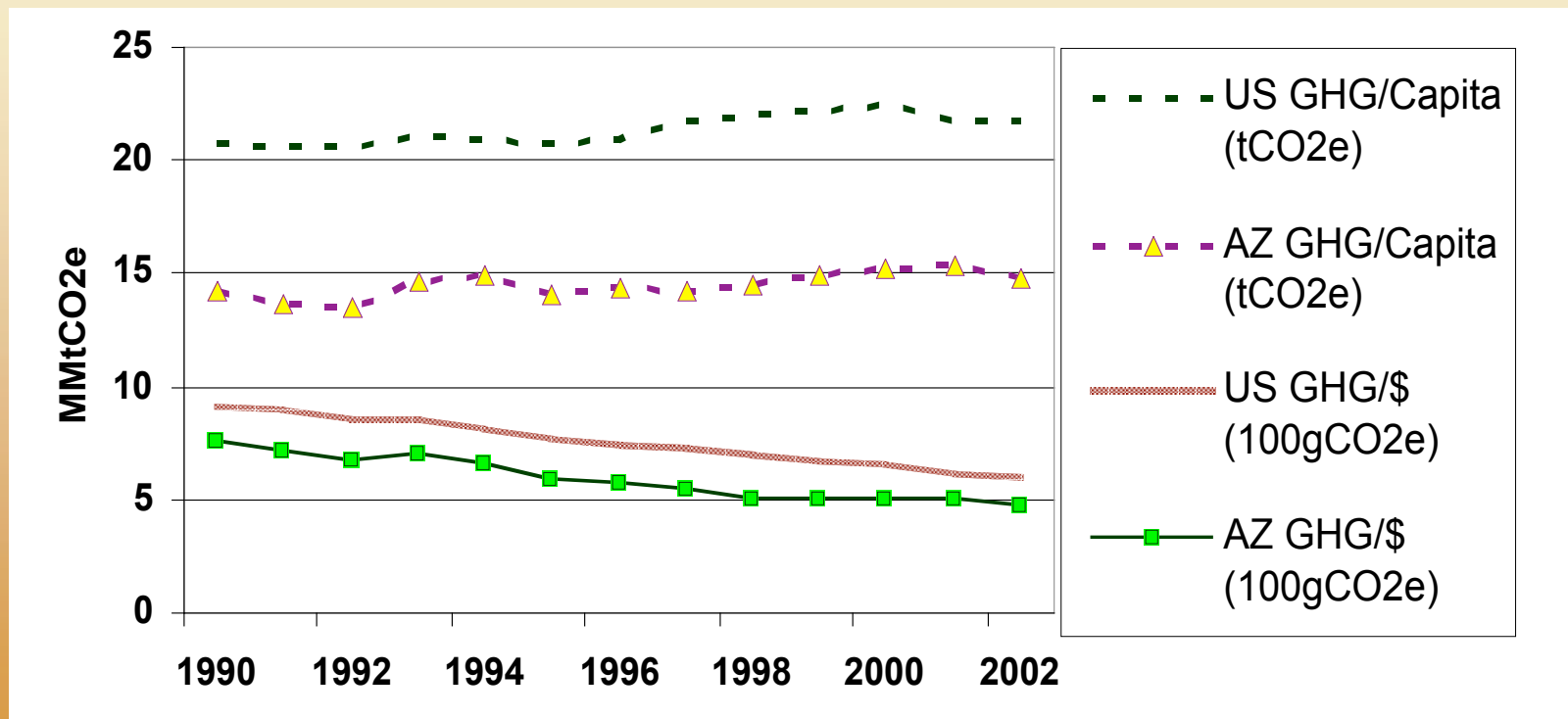
# AZ GROWTH RATES

- POPULATION AND NON-FARM JOBS: AZ DEPT ECONOMIC SECURITY
- GHG EMISSIONS: CCS INVENTORY AND FORECAST



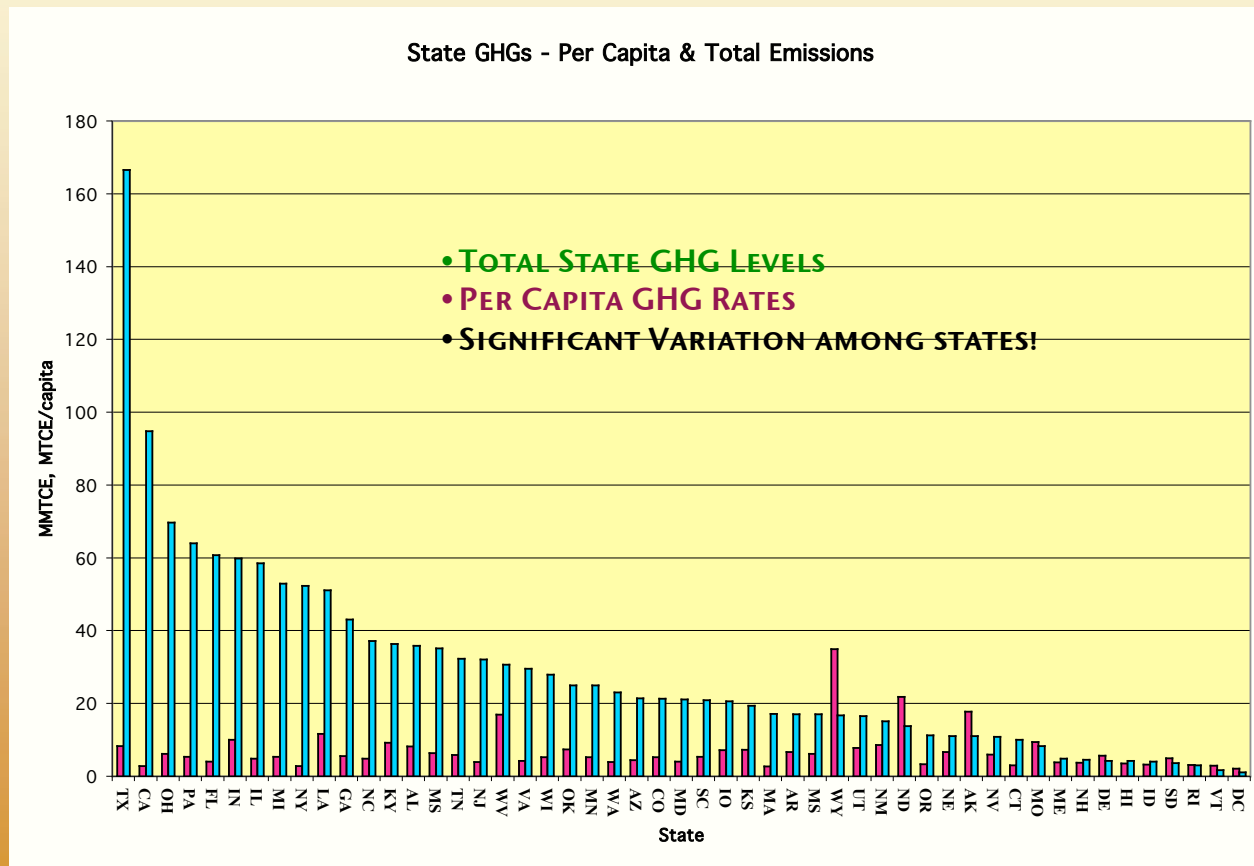
# AZ PER CAPITA, GSP GHGs

- EMISSIONS INTENSITY DECLINES AS OVERALL GHG LEVELS RISE
- PER CAPITA RATES VARY SLIGHTLY OVER TIME BUT STAY LEVEL



# STATE GHG LEVELS

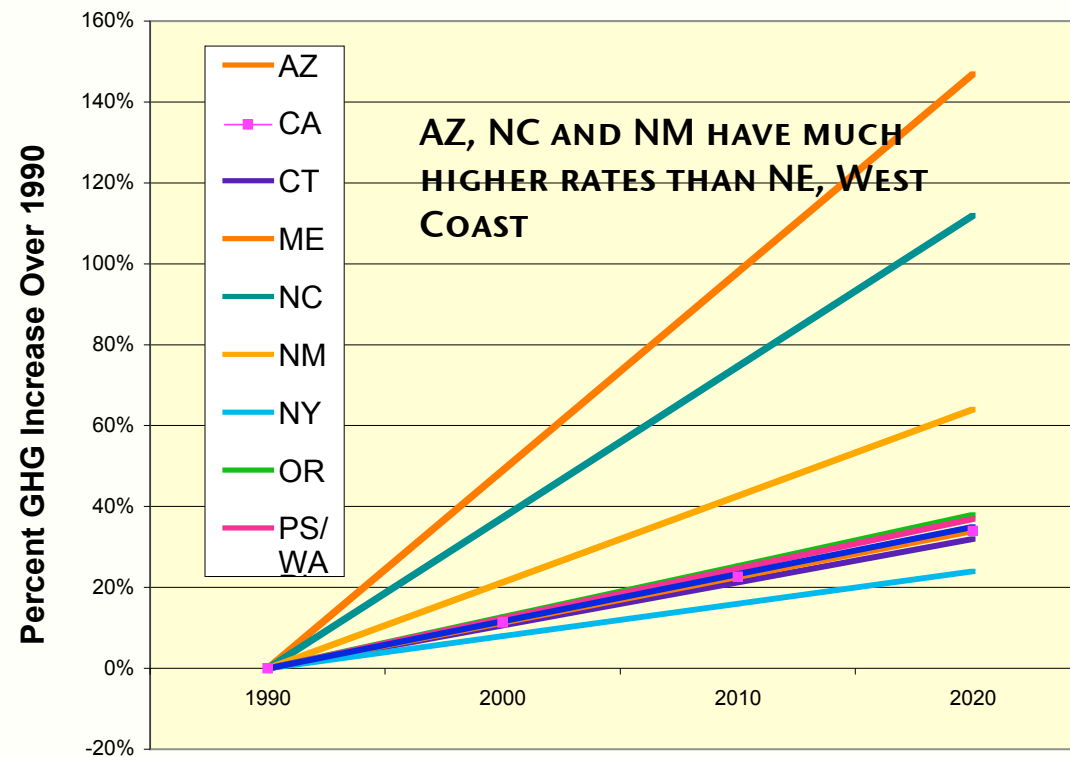
YEAR 2000, DOE CO<sub>2</sub> DATA



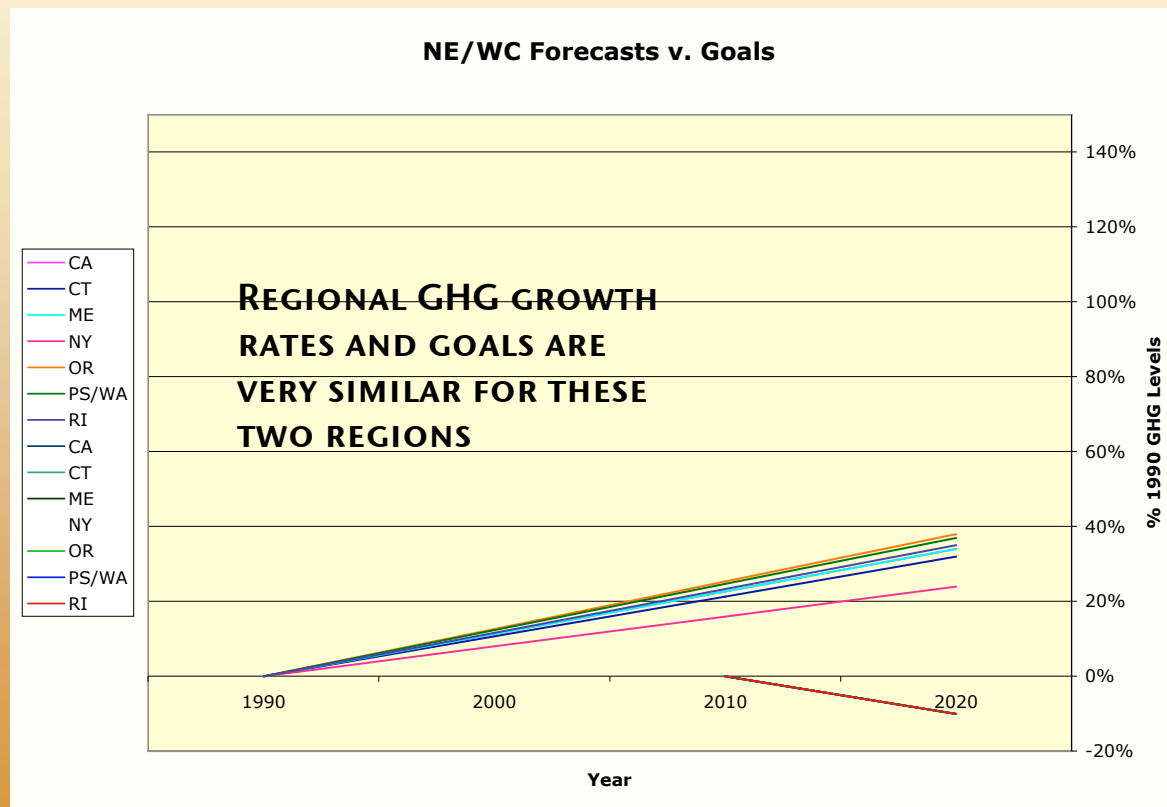
# GROWTH & GOALS

STATE	1990-2020 FORECAST	GHG GOALS	PLANNING RESULT
AZ	147%	?	TBD
CA	34%	2000 BY 2010; 10% BELOW BY 2020; 75% BY 2050	TBD
CT	32%	1990 BY 2010; 10% BELOW BY 2020; 75% BY 2100	100%
MA	?	1990 BY 2010; 10% BELOW BY 2020; 75% BY 2100	?
ME	34%	1990 BY 2010; 10% BELOW BY 2020; 75% BY 2100	100%
NC	122%	?	TBD
NEG	?	1990 BY 2010; 10% BELOW BY 2020; 75% BY 2100	TBD
NJ	?	5% -1990 BY 2005	100%
NM	64%	2000 BY 2012; 10% BELOW BY 2020; 75% BY 2050	TBD
NY	24%	5% BELOW 1990 BY 2010	?
OR	38%	1990 BY 2010; 10% BELOW BY 2020; 75% BY 2100	85%
PS/WA	37%	1990 BY 2010; 10% BELOW BY 2020; 75% BY 2100	100%
RI	35%	1990 BY 2010; 10% BELOW BY 2020; 75% BY 2100	100%

# STATE GHG GROWTH



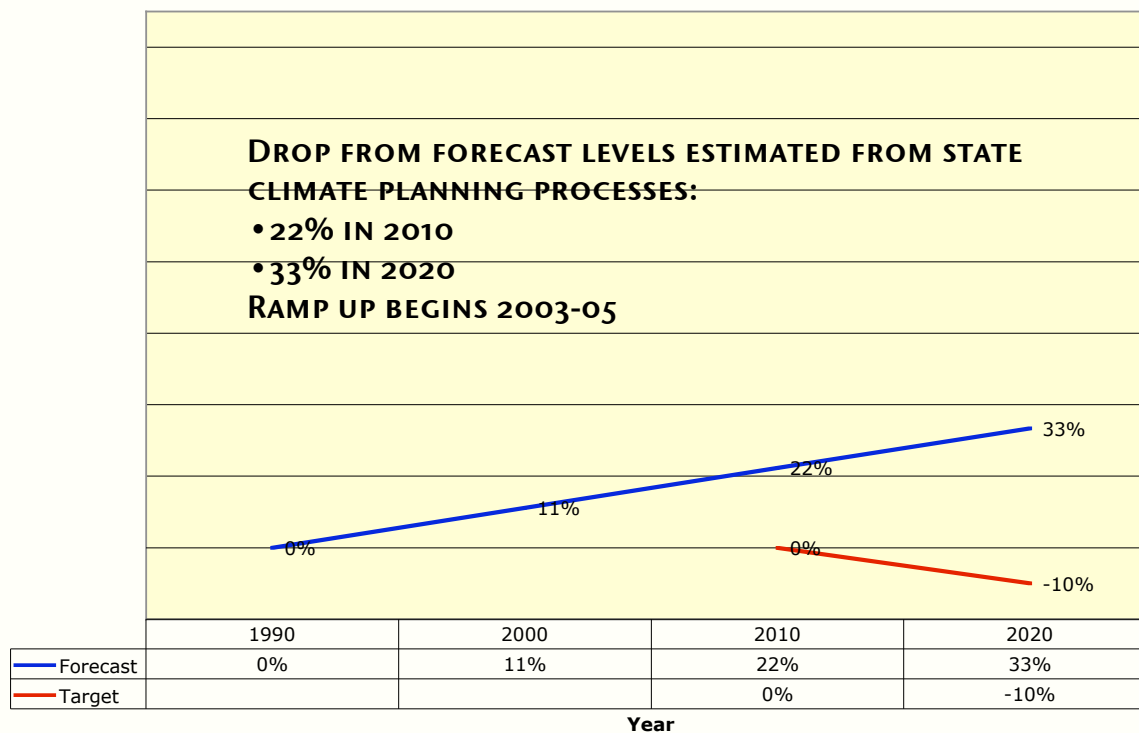
# NE/WEST COAST



# Avg NE/WEST COAST...

## • AVERAGE GHG GROWTH RATES V. GOALS

NE/WC Forecast v. Plan

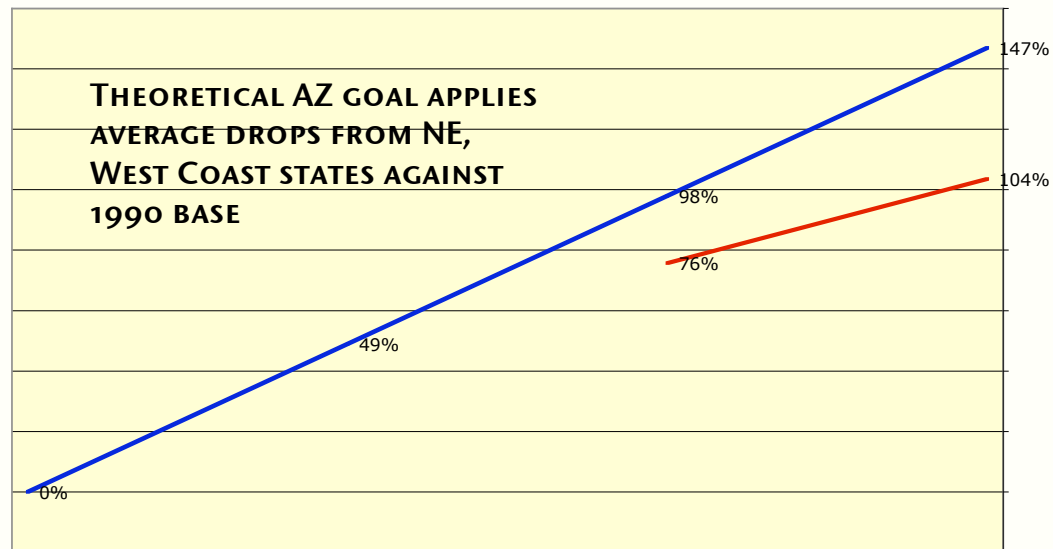




# POTENTIAL AZ GOAL

## 1990 BASE

AZ GHG Growth v. Straw Goal

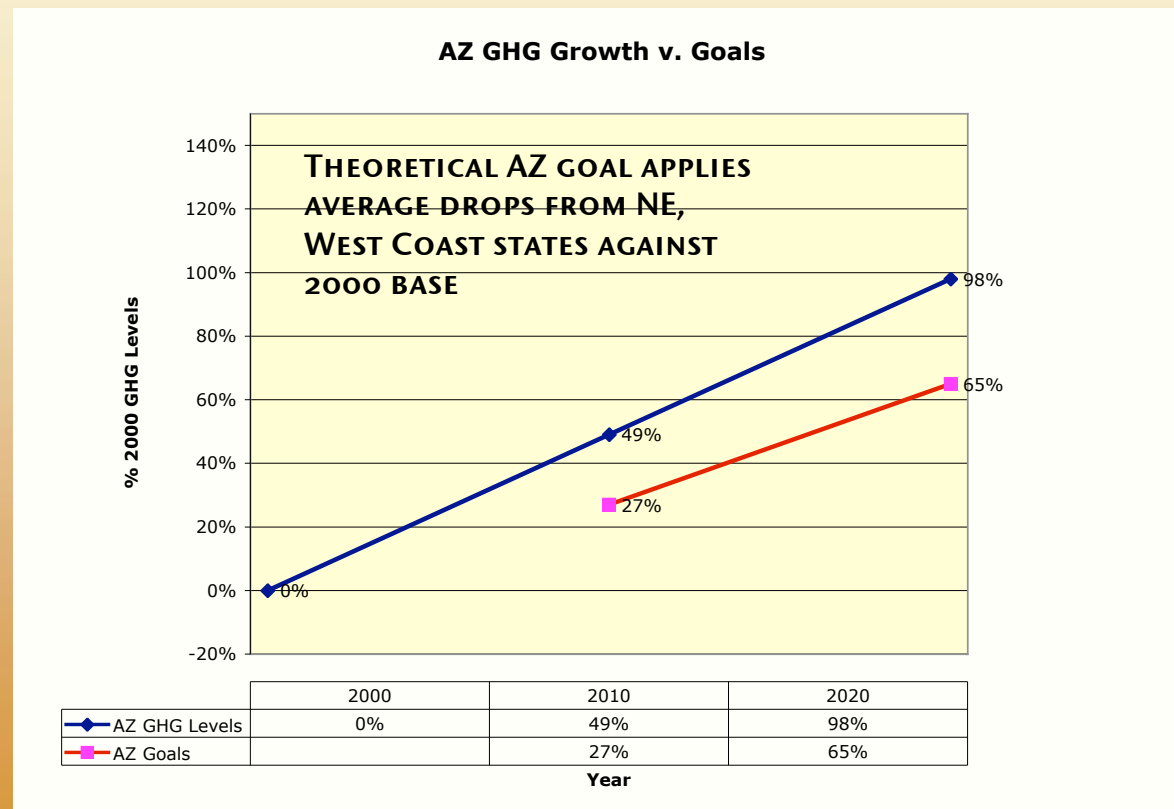


	1990	2000	2010	2020
AZ	0%	49%	98%	147%
			76%	104%

Year

# POTENTIAL AZ GOAL

## 2000 BASE



# **“COMMON BUT DIFFERENTIATED” CLIMATE GOALS**

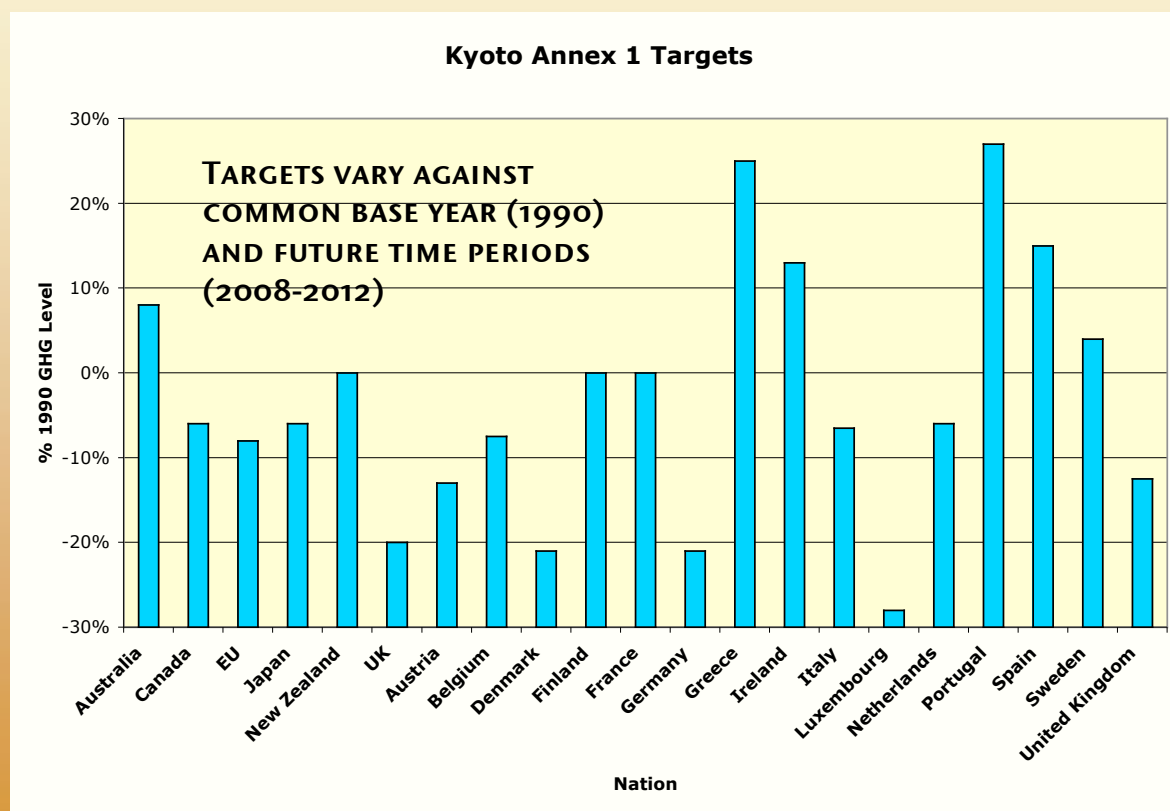


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# GLOBAL GHG TARGETS 2008-12



# ANALYSIS

- **DATA SOURCES**

- STATE GHG INVENTORIES AND FORECASTS (CONSUMPTION BASED)
- STATE PLANNING ESTIMATES OF POTENTIAL GHG REDUCTIONS THAT MEET REASONABLE DEGREE OF CONSENSUS
- SOME STATE PLANNING DATA IS NOT READILY AVAILABLE (CLOSED PROCESSES)
- KYOTO TARGETS: PEW CENTER FOR CLIMATE CHANGE
- POPULATION GROWTH: AZ DEPARTMENT OF ECONOMIC SECURITY, RESEARCH ADMINISTRATION, WORKFORCE INFORMER
- ECONOMIC GROWTH: NONFARM JOBS, AZ DEPARTMENT OF ECONOMIC SECURITY, RESEARCH ADMINISTRATION, WORKFORCE INFORMER

- **METHODS**

- AVERAGE RESULT OF NORTHEAST AND WEST COAST PLANNING EFFORTS AT CLOSING THE GAP
- PROPORTIONATE APPLICATION TO ARIZONA VIA REDUCTION BELOW FORECAST LEVELS

# ANALYSIS...

- **KEY ASSUMPTIONS**
  - **LINEAR GHG EMISSION TRENDS**
  - **AVERAGE ANNUAL (LINEAR) GHG REDUCTION ESTIMATES IN 2010 AND 2020**
  - **PROPORTIONATE EFFORT BY ARIZONA COMPARED TO COASTAL STATES**
- **KEY UNCERTAINTIES**
  - **RESULTS OF BOTTOM UP PLANNING BY THE CCAG, REGIONAL DIFFERENCES**
  - **RELIABILITY OF FORECASTING**
  - **RESULTS OF ACTUAL IMPLEMENTATION**
  - **MARGIN OF SAFETY AND OR ERROR**

# ADVANTAGES OF YOUTH...



- **AZ EMISSIONS DOUBLING IN 20 YEARS**
- **CLIMATE PROBLEM IS GROWING**
- **CURRENT COSTS MAY BE LOWER THAN FUTURE COSTS**
- **STATE GOALS MAY AFFECT MARKETS, MANDATES, CO-BENEFITS**



# NEXT STEPS

- SET NEXT CALL DATE AND TIME
- IDENTIFY POTENTIAL ISSUES AND APPROACHES FOR FURTHER DISCUSSION
- DEVELOP STRAW PROPOSALS
- COORDINATE WITH SECTOR-BASED TWGs
- DETERMINE CCAG PRIORITIES

# **FOR NEXT CCAG MEETING**

- **AGENDA ITEMS**
  - **DISCUSSION OF PRIORITIES**
  - **DISCUSS PLANS FOR STRAW PROPOSALS**
  - **DISCUSS COORDINATION WITH TWGs**

# CLOSING REMARKS

- **PUBLIC INPUT?**
- **ANNOUNCEMENTS?**



**CROSS CUTTING ISSUES  
TECHNICAL WORK GROUP  
CALL #2 - REPORTING,  
REGISTRIES, EDUCATION  
MARCH 3, 2006**



# **TODAY'S AGENDA**

- 1. CALL TO ORDER**
- 2. ROLL CALL**
- 3. REVIEW OF REPORTING, REGISTRIES AND EDUCATION ISSUES -- TIME PERMITTING**
- 4. CALL TO THE PUBLIC AND ANNOUNCEMENTS**
- 5. AGENDA ITEMS FOR CCAG MEETING**

# **PART 2**

- **REPORTING, REGISTRIES, EDUCATION**
  - **REPORTING AND REGISTRIES ARE LINKED**
    - **EMISSIONS V. EMISSIONS REDUCTIONS**
    - **INCENTIVE SYSTEMS**
  - **EDUCATION SUPPORTS INDIVIDUAL AND COLLECTIVE POLICY EFFORTS**

# **REPORTING & REGISTRIES**

- **MULTIPLE APPROACHES HAVE EMERGED**
  - MANY PURPOSES AND GOALS
  - MANY QUANTIFICATION PROTOCOLS
  - MANY REGISTRY APPROACHES
  - MANY MARKET ENTRANTS
- **SOME CLARITY & STANDARDS EVOLVING**
  - WRI/WBCSD GHG PROTOCOLS
  - ISO 14064 GHG QUANTIFICATION STANDARDS
  - REGIONAL REGISTRY EFFORTS
  - BROADER REGISTRY DISCUSSIONS



# GHG REPORTING

- **PURPOSE AND GOALS**
  - **MEASURE GHG EMISSIONS**
  - **BUILD AWARENESS AND CAPACITY**
  - **DIAGNOSE AND TRACK GHG EMISSIONS**
  - **CONSIDER AND PLAN FOR SOLUTIONS**
  - **BETTER MANAGE EMISSIONS**
  - **IDENTIFY WAYS TO INCREASE RELATED BENEFITS OF EMISSIONS REDUCTIONS**
  - **ENABLES OTHER GOALS**

# **GHG REPORTING**

- **KEY TECHNICAL AND POLICY ISSUES**
  - **POLICY ENDPOINTS**
  - **VOLUNTARY OR MANDATORY**
  - **WHICH GASES**
  - **APPLICABILITY (SECTORS, SOURCES, LEVELS)**
  - **BOUNDARY ISSUES**
  - **QUANTIFICATION, MEASUREMENT, & VERIFICATION**
  - **OPERATIONAL ISSUES (LEAD AGENCY, START DATE, REPORTING PERIOD, TRANSPARENCY, COST, ETC.)**

# GHG REGISTRY

- **PURPOSE AND GOALS**
  - **RECORDING OF GHG REDUCTION ACTIVITIES**
  - **PROVIDE MANAGEMENT INFORMATION SYSTEM**
    - **DATA MANAGEMENT & ACCOUNTING**
    - **CENTRAL, INDEPENDENT REPOSITORY**
  - **SUPPORT POLICY IMPLEMENTATION**
    - **INCENTIVE TO TRACK & MANAGE EMISSIONS**
    - **PUBLIC AND/OR LEGAL RECOGNITION**
    - **CREDIT AND/OR BASELINE PROTECTION**
    - **POSSIBLE REGIONAL & CROSS-BORDER COOPERATION**

# GHG REGISTRY

- **KEY TECHNICAL AND POLICY ISSUES**
  - **POLICY OBJECTIVES**
  - **BASELINE/BASE YEAR**
  - **INCREMENTAL REDUCTIONS**
  - **REDUCTIONS FROM OTHER SECTORS**
  - **BOUNDARY ISSUES**
  - **OWNERSHIP & DOUBLE-COUNTING**
  - **MONITORING & DATA QUALITY**
  - **VERIFICATION/CERTIFICATION**
  - **PROJECTS VS. PROGRAMS**
  - **STATE-TO-STATE CONSISTENCY**
  - **OPERATIONAL & ADMINISTRATIVE ISSUES**

# **PUBLIC EDUCATION**

- **PURPOSE AND GOALS**

- **PUBLIC AWARENESS OF NEED FOR ACTION**
- **AWARENESS OF SPECIFIC PROGRAMS & EFFORTS**
- **AWARENESS THAT INDIVIDUAL ACTIONS COUNT;  
(AND MAY BE REWARDED, E.G., REBATES)**

- **KEY TECHNICAL AND POLICY ISSUES**

- **AUDIENCE(S), MESSAGES, PROGRAM LINKAGE**
- **APPROACHES, RESPONSIBILITY**
- **SCOPE AND BREADTH**
- **COSTS AND RESULTS**

# NEXT STEPS

- IDENTIFY EXISTING AZ ACTIONS
- IDENTIFY POTENTIAL APPROACHES
- DEVELOP STRAW PROPOSALS
- COORDINATE WITH SECTOR-BASED TWGs
- REFLECT CCAG PRIORITIES

# **CLOSING REMARKS**

- **PUBLIC INPUT?**
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# **FOR NEXT CCAG MEETING**

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